

TEST REPORT
of the accredited test laboratory

TÜV Nr.:INE-AT/FG-19/152

Applicant: AKG Acoustics GmbH
Salzgasse 2
5400 Hallein, Austria

Tested Product: Hand-held digital wireless microphone transmitter,
Model: 'DMS100-HT100'

FCC-ID: API-HT100

IC-ID: 6132A-HT100

Manufacturer: VTech Communications Ltd.
Xia Ling Bei Management Zone, Liaobu, Dongguan,
Guangdong Province
523411 China

Output power / 4,90 mW e.i.r.p. **power supply:** 3 VDC
field strength: internal battery

Frequency range: 2402 - 2480 MHz **Channel separation:** 1 MHz

Standard: FCC: 47 CFR Part 15 (October 1, 2017 edition)
RSS-247 Issue 2, February 2017

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Certification Body,
Calibration Laboratory,
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BIC RZBAATWWVAT ATU63240488
DVR 3002476**TÜV Austria Services GmbH**
Test laboratory for EMC

Supervisor of EMC-laboratory:

Ing. Wilhelm Seier

12.03.2019

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checked by:

Ing. Michael Emminger

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The results of this test report only refer to the provided equipment.

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1. Applicant

Company: AKG Acoustics GmbH

Department: R&D

Address: Salzgasse 2
5400 Hallein, Austria

Contact person: Mr. Gabor Mikovics

EUT received on: 04.03.2019

Tests were performed on: 04.03. till 08.03.2018

2. Description of EUT

EUT:	Hand-held digital wireless microphone transmitter, Model: 'DMS100-HT100'
Serial Number:	Prototype
Manufacturer:	AKG Acoustics GmbH Salzgasse 2 5400 Hallein, Austria
Description:	AKG Acoustics GmbH provided the following configuration for the measurements: Prototype
Operating mode:	The measurements were carried out at the following running states: test-firmware running, transmitting continuously
Technical data EUT:	Rated voltage: 3VDC Rated current: 130mA Rated frequency: DC Mains voltage during the tests: 3VDC internal battery
Climatic conditions in the emc laboratory:	Relative humidity: 24% Temperature: 23°C

3. Standards / Final result

Name	Title	Deviation	Result
Title 47 CFR Part 15 October 1 st 2017 edition	RADIO FREQUENCY DEVICES	none	OK
RSS-247 Issue 2, February 2017	Digital Transmission Systems (DTSS), Frequency Hopping Systems (FHSs) and Licence-Exempt Local Area Network (LE-LAN) Devices	none	OK
Result: Opinions and interpretation of testing laboratory OK: EUT passed NOK: EUT failed			

4. TEST RESULTS

4.1. TEST OBJECT DATA

General EUT Description

This wireless microphone transmitter is working together with an associated receiver. In fact both are transceiver, because the communication link on the 2.4 GHz frequency band is bidirectional.

2.1033 (c) Technical description

2.1033 (4) Type of emission: 680KF1D – Channel spacing 1 MHz

2.1033 (5) Frequency range: 2402 to 2480 MHz (channel center frequencies).

2.1033 (6) Power range and Controls: The maximum peak output power is 4,90 mW and there is no power regulation.

2.1033 (7) Maximum output power rating: 4,90 mW.

2.1033 (8) DC Voltage and Current: 3V DC from internal battery
maximum current consumption: 130 mA

RSS-135 This standard does not apply to:

- 1.1.(a) a receiver that scans radio frequencies for the purpose of enabling its associated transmitter to avoid transmitting in an occupied frequency but which does not have the capability of decoding the message (e.g. converting it to audio voice) contained in the radio signal

Worst case Spurious Emissions: 40,1 dBµV/m Average.

Tests were performed March 4th till March 8th 2019.

4.2. Number of channels and channel spacing

§ 2.1033

Conducted Measurement

Rated output power: 4,90 mW

There are 79 Channels used, starting at 2402 till 2480 MHz each separated by 1 MHz channel spacing.

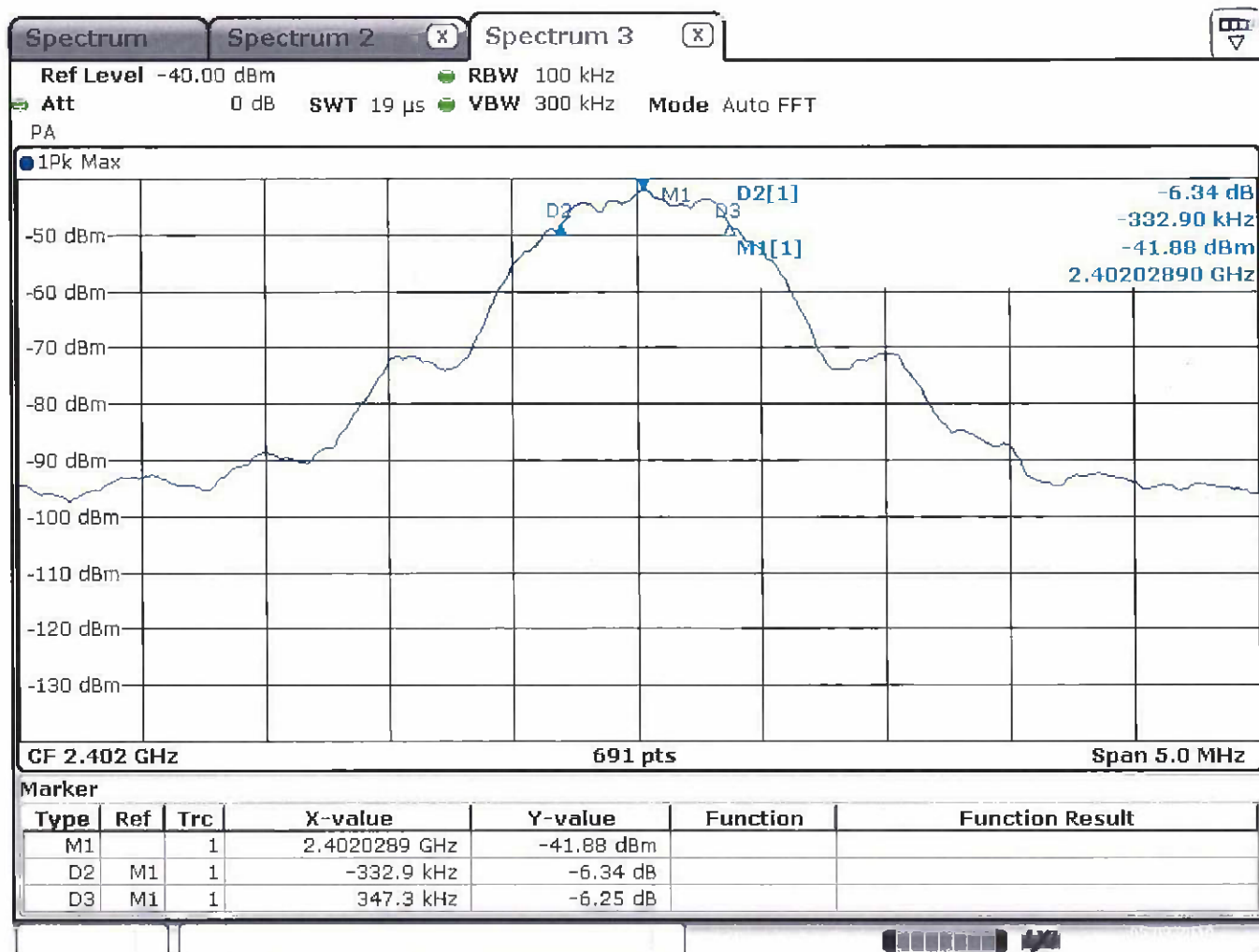
Test Equipment used: N/A

4.3. 6dB Bandwidth

§ 15.247(a)(2)
5.2(1)

Radiated Measurement

Rated output power: 4,90 mW 2402 MHz center frequency



Date: 5.MAR.2019 09:56:20

6dB Bandwidth: 680,2 kHz

LIMIT SUBCLAUSE 15.247(e) – 5.2(1)

Under normal test conditons	6 dB Bandwidth at least 500 kHz
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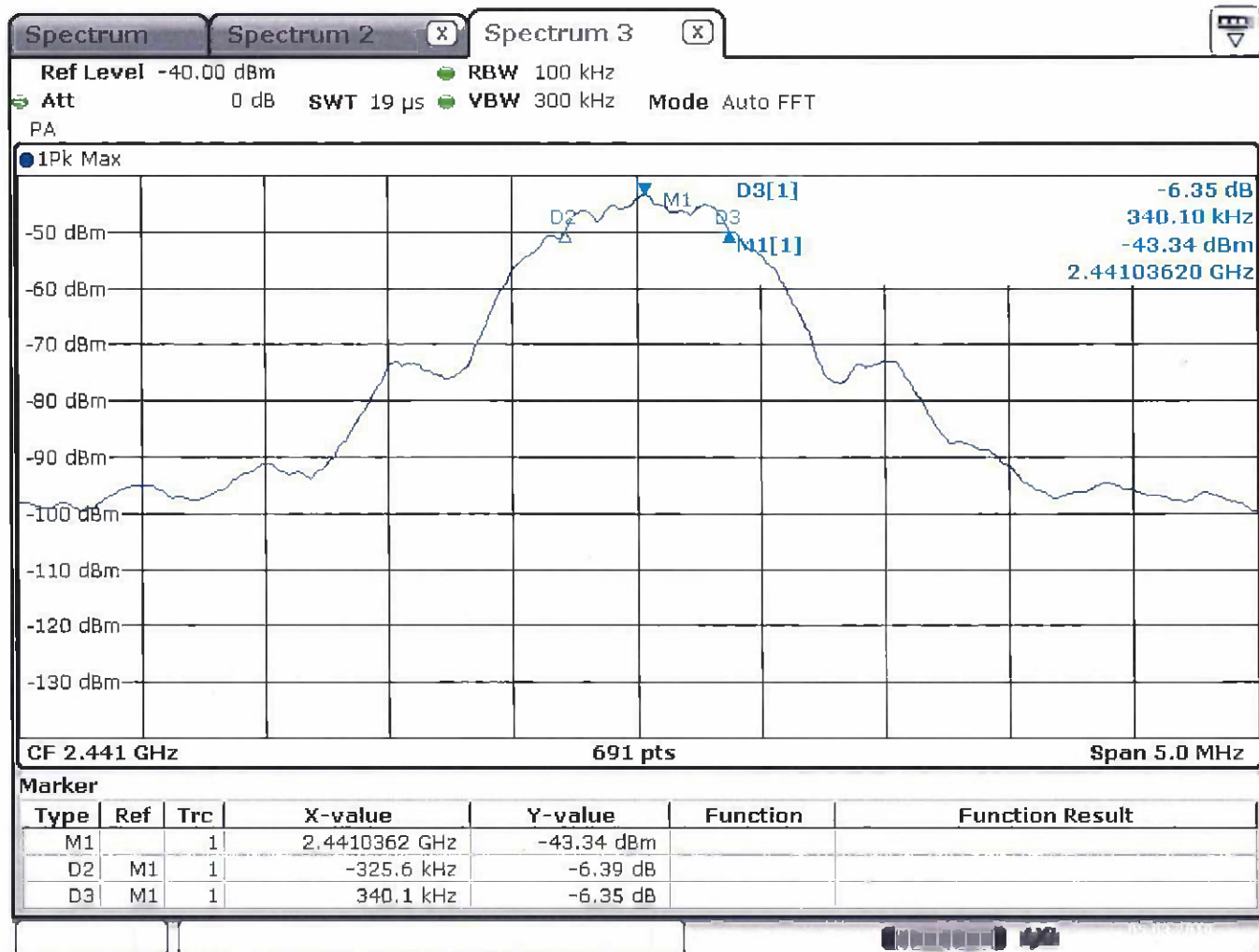
Test Equipment used: EMV-205

6dB Bandwidth

§ 15.247(a)(2)
5.2(1)

Radiated Measurement

Rated output power: 4,90 mW 2441 MHz center frequency



Date: 5.MAR.2019 09:58:41

6dB Bandwidth: 665,7 kHz

LIMIT **SUBCLAUSE 15.247(e) – 5.2(1)**

Under normal test conditons	6 dB Bandwidth at least 500 kHz
-----------------------------	---------------------------------

Test Equipment used: EMV-205

6dB Bandwidth

§ 15.247(a)(2)
5.2(1)

Radiated Measurement

Rated output power: 4,90 mW 2480 MHz center frequency



Date: 5.MAR.2019 10:12:41

6dB Bandwidth: 665,7 kHz

LIMIT SUBCLAUSE 15.247(e) – 5.2(1)

Under normal test conditons	6 dB Bandwidth at least 500 kHz
-----------------------------	---------------------------------

Test Equipment used: EMV-205

4.4. Maximum Peak RF Power Output (radiated)

§ 15.247(b)(3)
5.4(4)

e.i.r.p. Measurement

Rated output power: 4,90 mW

Test conditions		Transmitter power (mW)		
		2402 MHz	2440 MHz	2480 MHz
T_{nom} (23)°C	V_{nom} (3) V	4,90	4,07	3,63
Maximum deviation from rated output power under normal test conditions (dB)		0,0	-0,8	-1,3
Measurement uncertainty		$\pm 0,75$ dB		

LIMIT

SUBCLAUSE 15.247(b)(3) – 5.4(4)

Under normal test conditons	1W conducted (4W eirp)
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Test Equipment used: NT-100; NT-110; NT-129; NT-207

4.5. Power spectral density (radiated)

§ 15.247(e)
5.2(2)

e.i.r.p. Measurement

Rated output power: 4,90 mW 2402 MHz center frequency



Date: 5.MAR.2019 10:08:38

Power Spectral density: -8,08 dBm @ 2402,029 MHz

LIMIT SUBCLAUSE 15.247(e) – 5.2(2)

Under normal test conditons	+8dBm in any 3 kHz band
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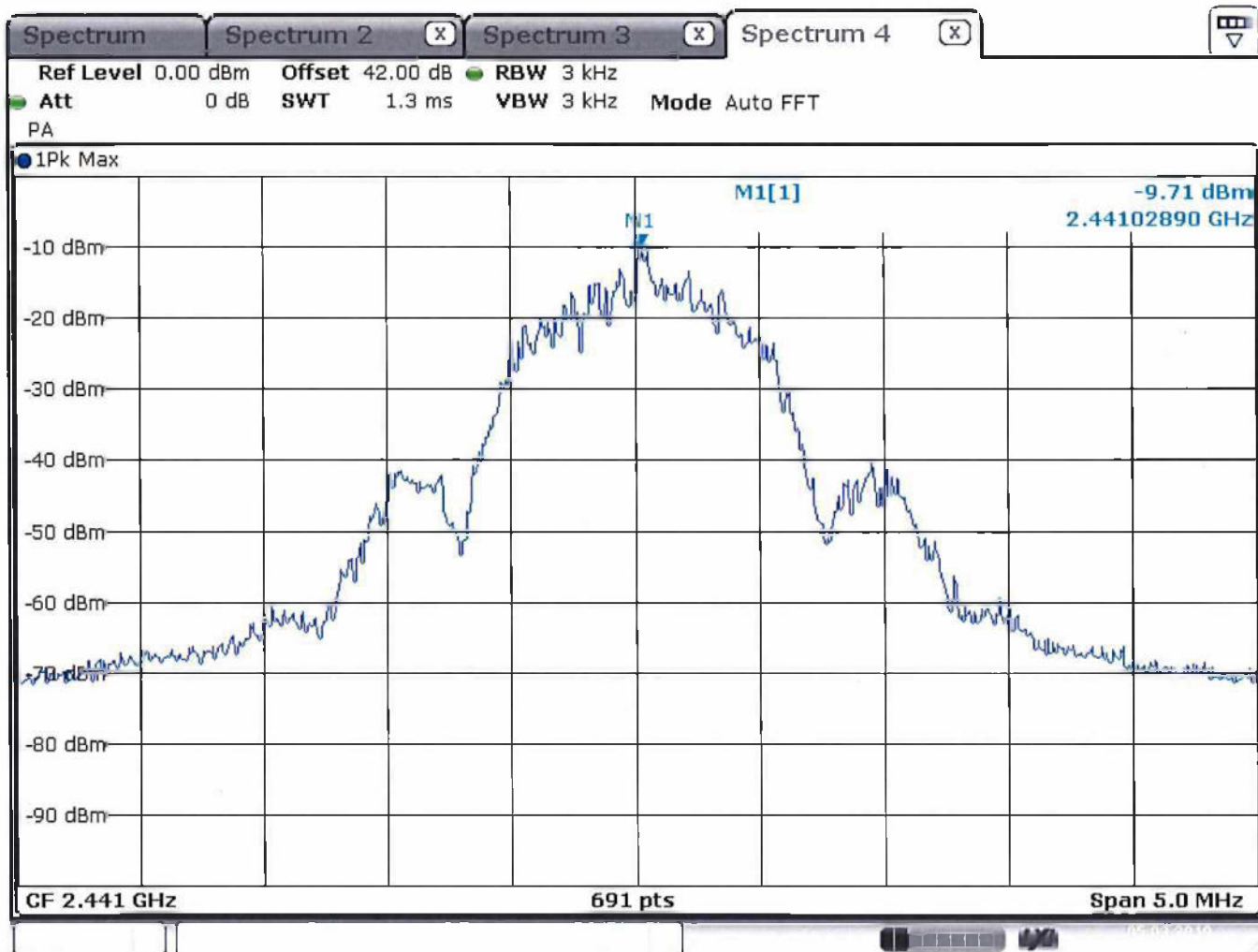
Test Equipment used: EMV-205

Power spectral density (radiated)

§ 15.247(e)
5.2(2)

e.i.r.p. Measurement

Rated output power: 4,90 mW 2441 MHz center frequency



Date: 5.MAR.2019 10:06:30

Power Spectral density: -9,71 dBm @ 2441,029 MHz

LIMIT SUBCLAUSE 15.247(e) – 5.2(2)

Under normal test conditons	+8dBm in any 3 kHz band
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Test Equipment used: EMV-205

Power spectral density (radiated)

§ 15.247(e)
5.2(2)

e.i.r.p. Measurement

Rated output power: 4,90 mW 2480 MHz center frequency



Date: 5.MAR.2019 10:11:38

Power Spectral density: -11,10 dBm @ 2480,029 MHz

LIMIT SUBCLAUSE 15.247(e) – 5.2(2)

Under normal test conditons	+8dBm in any 3 kHz band
-----------------------------	-------------------------

Test Equipment used: EMV-205

**4.6. Out-of-band Emission
Unwanted Emissions**

**§ 15.247(d)
5.5**

Radiated Measurement

See 15.209 measurements in chapter 4.7 of this report.

LIMIT SUBCLAUSE 15.247(d) – 5.5

In any 100 kHz bandwidth outside the frequency band in which the radio device is operating.	At least 20dB below the power in the 100 kHz bandwidth within the band that contains the highest level of the desired power.
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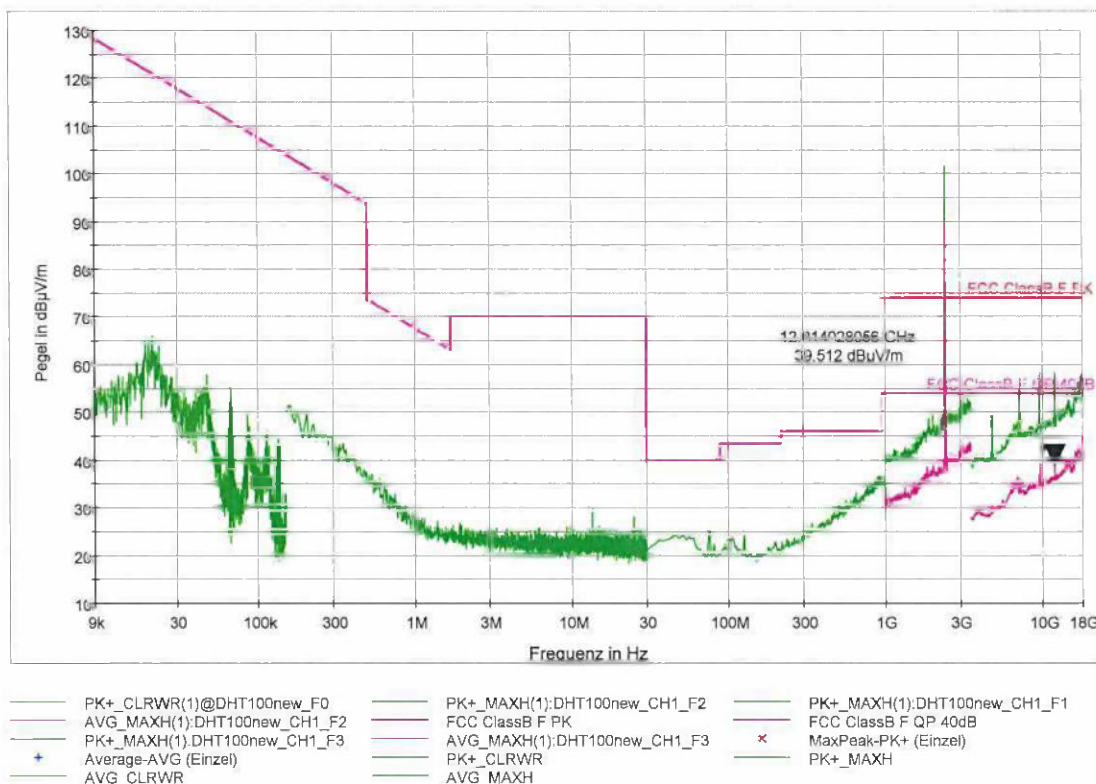
Test Equipment used: N/A

4.7. Emissions in restricted bands Emissions falling within restricted frequency bands

§ 15.209(a)
RSS-Gen

Measurement with Peak-Detector (green line) and Average detector (magenta line):

Setup: 2402 MHz



Remark: Although the measurement above ends at 18 GHz, all measurements were performed up to the tenth harmonics of the transmitter frequency.

LIMIT SUBCLAUSE 15.209(a) – RSS-Gen

Frequency (MHz)	Field strength (microvolts/meter)	Measurement distance (meters)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30.0	30	30
30-88	100**	3
88-216	150**	3
216-960	200**	3
Above 960	500	3

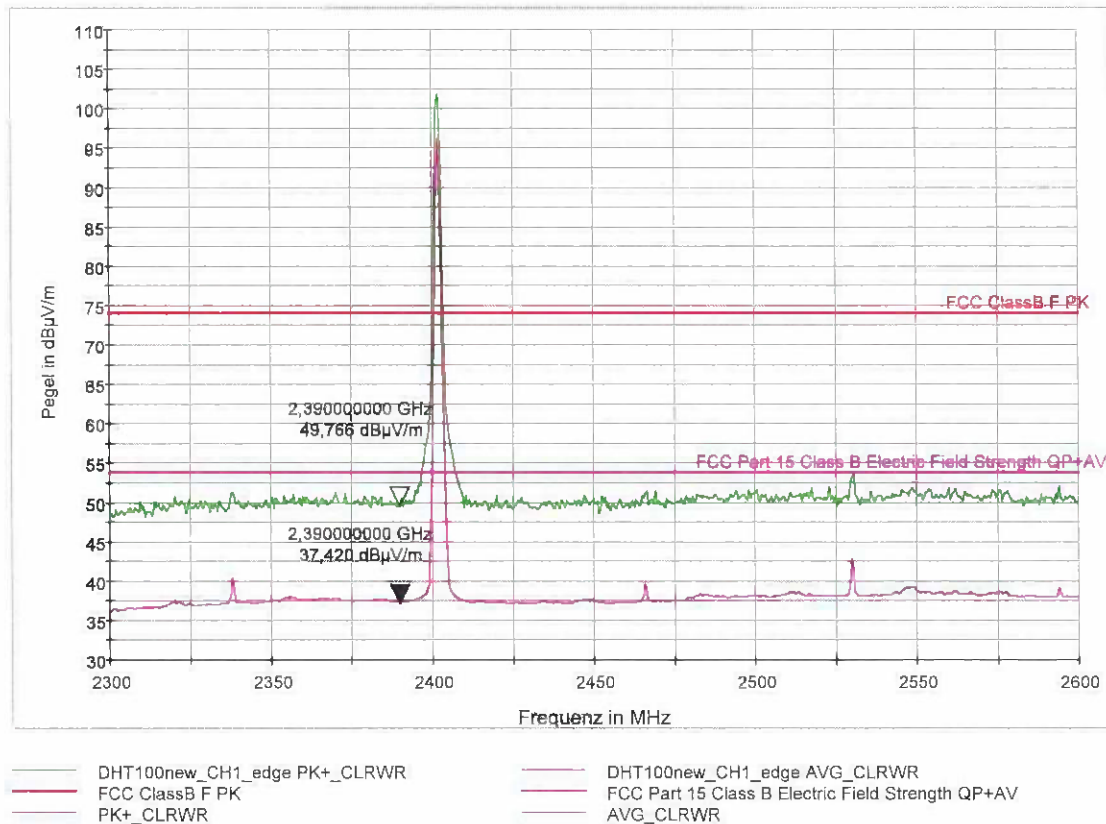
Test Equipment used: EMV-100; EMV-101; EMV-102; EMV-103; EMV-105; EMV-110; EMV-111; EMV-112; EMV-114; EMV-200; EMV-205; NT-122; NT-126; NT-416

Emissions in restricted bands
Emissions falling within restricted frequency bands

§ 15.209(a)
RSS-Gen

Measurement with Peak-Detector (green line) and Average detector (magenta line): Band Edge requirement

Setup: 2402 MHz



In normal operation the EUT always operates on two RF channels alternately, switching at a rate of 20 milliseconds. As worst case scenario the two lowest channels were used.

LIMIT **SUBCLAUSE 15.209(a) – RSS-Gen**

Frequency (MHz)	Field strength (microvolts/meter)	Measurement distance (meters)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30.0	30	30
30-88	100**	3
88-216	150**	3
216-960	200**	3
Above 960	500	3

Band edges of the nearest restricted bands: 2390 MHz and 2483,5 MHz.

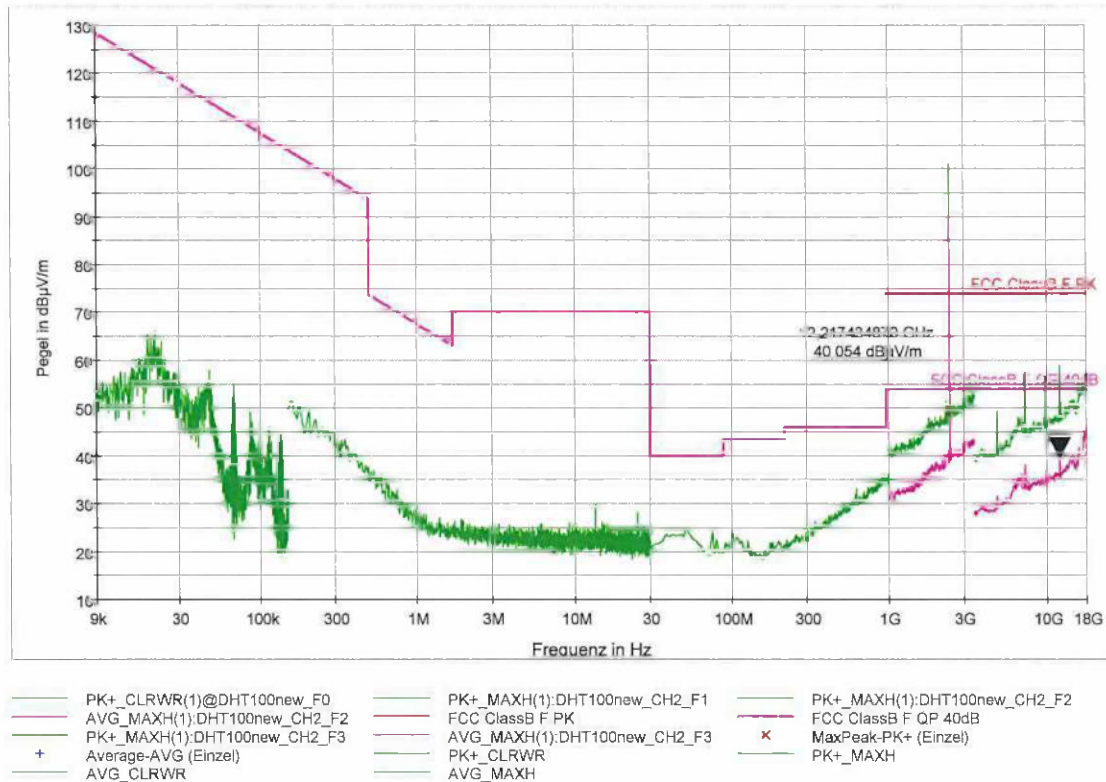
Test Equipment used: EMV-100; EMV-101; EMV-102; EMV-103; EMV-105; EMV-110; EMV-200

Emissions in restricted bands
Emissions falling within restricted frequency bands

§ 15.209(a)
RSS-Gen

Measurement with Peak-Detector (green line) and Average detector (magenta line):

Setup: 2441 MHz



Remark: Although the measurement above ends at 18 GHz, all measurements were performed up to the tenth harmonics of the transmitter frequency.

LIMIT **SUBCLAUSE 15.209(a) – RSS-Gen**

Frequency (MHz)	Field strength (microvolts/meter)	Measurement distance (meters)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30.0	30	30
30-88	100**	3
88-216	150**	3
216-960	200**	3
Above 960	500	3

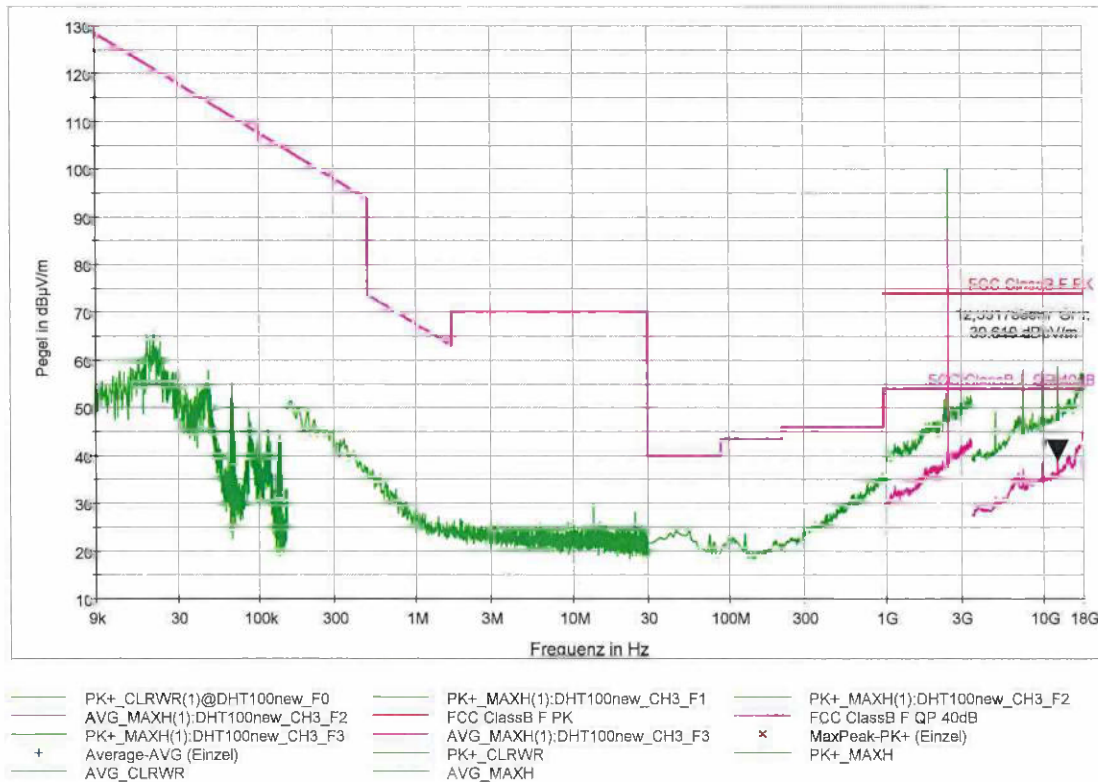
Test Equipment used: EMV-100; EMV-101; EMV-102; EMV-103; EMV-105; EMV-110; EMV-111; EMV-112; EMV-114; EMV-200; EMV-205; NT-122; NT-126; NT-416

Emissions in restricted bands
Emissions falling within restricted frequency bands

§ 15.209(a)
RSS-Gen

Measurement with Peak-Detector (green line) and Average detector (magenta line):

Setup: 2480 MHz



Remark: Although the measurement above ends at 18 GHz, all measurements were performed up to the tenth harmonics of the transmitter frequency.

LIMIT **SUBCLAUSE 15.209(a) – RSS-Gen**

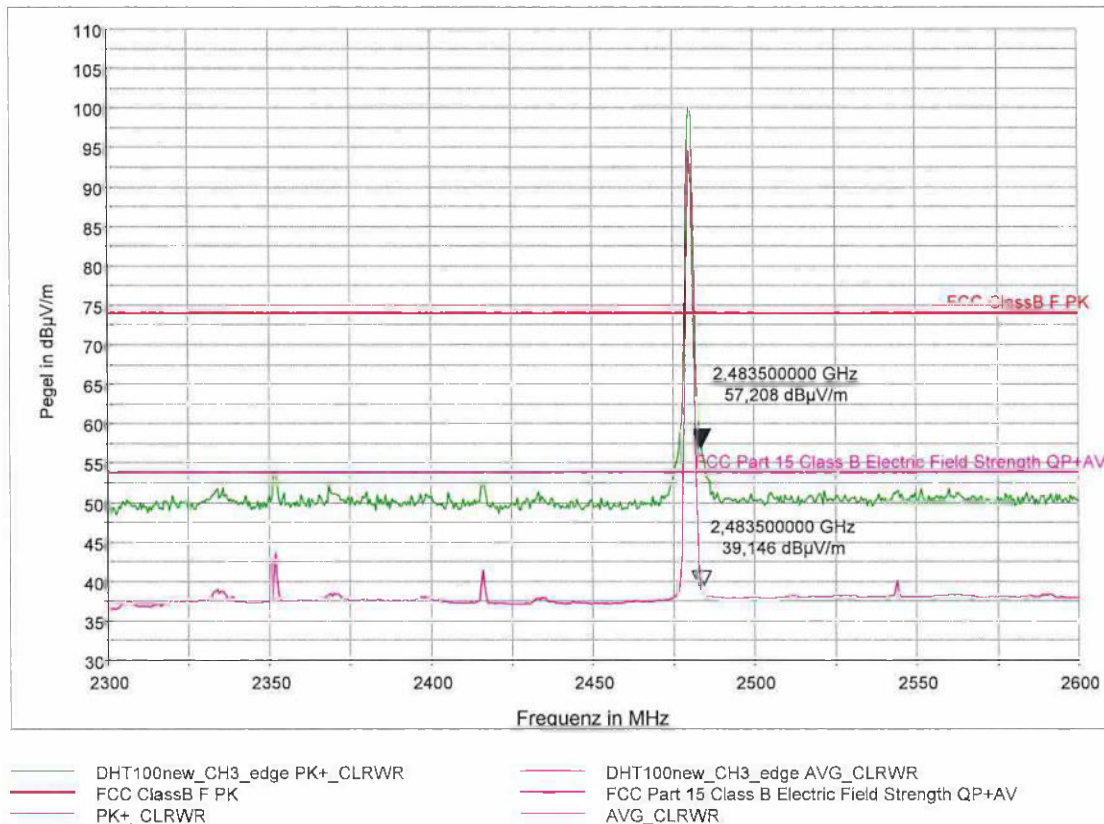
Frequency (MHz)	Field strength (microvolts/meter)	Measurement distance (meters)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30.0	30	30
30-88	100**	3
88-216	150**	3
216-960	200**	3
Above 960	500	3

Test Equipment used: EMV-100; EMV-101; EMV-102; EMV-103; EMV-105; EMV-110; EMV-111; EMV-112; EMV-114; EMV-200; EMV-205; NT-122; NT-126; NT-416

Emissions in restricted bands § 15.209(a)
Emissions falling within restricted frequency bands RSS-Gen

Measurement with Peak-Detector (green line) and Average detector (magenta line): Band Edge requirement

Setup: 2480 MHz



In normal operation the EUT always operates on two RF channels alternately, switching at a rate of 20 milliseconds. As worst case scenario the two highest channels were used.

LIMIT SUBCLAUSE 15.209(a) – RSS-Gen

Frequency (MHz)	Field strength (microvolts/meter)	Measurement distance (meters)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30.0	30	30
30-88	100**	3
88-216	150**	3
216-960	200**	3
Above 960	500	3

Band edges of the nearest restricted bands: 2390 MHz and 2483,5 MHz.

Test Equipment used: EMV-100; EMV-101; EMV-102; EMV-103; EMV-105; EMV-110; EMV-200

4.8. Maximum permissible Exposure

§ 15.247(i)

This kind of radio equipment is categorically excluded from routine environmental evaluation.

Appendix 1

Test equipment used

☐ Anechoic Chamber with 3m measurement distance	NT-100	☐ Power quality analyzer Fluke 1760 (complete set)	NT-160 - NT-173
☐ Stripline according to ISO 11452-5	NT-108	☐ Spectrum analyzer – FSP7 9 kHz – 7 GHz	NT-200
☐ MA4000 - Antenna mast 1 - 4 m height	NT-110/1	☐ ESCI - Test receiver 9 kHz - 7 GHz	NT-203/1
☐ DS - Turntable 0 - 400 ° Azimuth	NT-111/1	☐ ESI26 – Test receiver 20 Hz – 26,5 GHz	NT-207
☐ CO3000 Controller Mast+Turntable	NT-112/1	☐ Digital Radio Tester CTS55	NT-208
☐ HUF-Z3 - Log. Per. Antenna 200 - 1000 MHz	NT-121	☐ Noise-gen., ITU-R 559-2 20 Hz – 20 kHz	NT-209
☐ FMZB1513 - Loop Antenna 9 kHz - 30 MHz	NT-122/1	☐ CMTA - Radiocommunication analyzer ; 0,1 - 1000 MHz	NT-210
☐ HFH-Z6 - Rod Antenna 9 kHz - 30 MHz	NT-123	☐ 3271 - Spectrum analyzer 100 Hz - 26,5 GHz	NT-211
☐ 3121C - Dipole Antenna 28 - 1000 MHz	NT-124	☐ Digital Radio Tester Aeroflex 3920	NT-212/1
☐ 3115 - Horn Antenna 1 - 18 GHz (immunity)	NT-125	☐ Mixer M28HW 26,5 GHz - 40 GHz	NT-214
☐ 3116 - Horn Antenna 18 - 40 GHz	NT-126	☐ RubiSource T&M Timing reference	NT-216
☐ SAS-200/543 - Bicon. Antenna 20 MHz - 300 MHz	NT-127	☐ Radiocommunication analyzer SWR 1180 MD	NT-217
☐ AT-1080 - Log. Per. Antenna 80 - 1000 MHz	NT-128	☐ Mixer M19HWD 40 GHz – 60 GHz	NT-218
☐ HK-116 - bicon. Antenna 20 MHz - 300 MHz	NT-129	☐ Mixer M12HWD 60 GHz – 90 GHz	NT-219
☐ HK-116 - bicon. Antenna 20 MHz - 300 MHz	NT-130	☐ DSO9104 Digital scope	NT-220/1
☐ 3146 - Log. Per. Antenna 200 – 1000 MHz	NT-131	☐ TPS 2014 Digital scope	NT-222
☐ VULB 9163 Trilog Antenna 30 – 3000 MHz	NT-131/1	☐ Artificial Ear according to IEC 60318	NT-224
☐ Loop Antenna H-Field	NT-132	☐ 1 kHz Sound calibrator	NT-225
☐ Horn Antenna 500 MHz - 2900 MHz	NT-133	☐ B10 - Harmonics and flicker analyzer	NT-232
☐ Horn Antenna 500 MHz - 6000 MHz	NT-133/1	☐ SRM-3006 Spectrum analyzer	NT-233/1a
☐ Log. per. Antenna 800 MHz - 2500 MHz	NT-134	☐ E-field probe SRM 75 MHz – 3 GHz	NT-234
☐ Log. per. Antenna 800 MHz - 2500 MHz	NT-135	☐ Field Meter NBM-500 incl. E- and H-Field probes	NT-240a-e
☐ BiConiLog Antenna 26 MHz – 2000 MHz	NT-137	☐ Hall-Teslameter ETM-1	NT-241
☐ Conical Dipol Antenna PCD8250	NT-138	☐ EFA-3 H-field- / E-field probe	NT-243
☐ HF 906 - Horn Antenna 1 - 18 GHz (emission)	NT-139	☐ EHP-50F H-field- / E-field probe	NT-243/1
☐ HZ-1 Antenna tripod	NT-150	☐ Field Meter EMR-200 100 kHz – 3 GHz	NT-244
☐ BN 1500 Antenna tripod	NT-151	☐ E-field probe 100 kHz – 3 GHz	NT-245
☐ Ant. tripod for EN61000-4-3 Model TP1000A	NT-156	☐ H-field probe 300 kHz – 30 MHz	NT-246

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Industry & Energy

Department: FG

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Appendix 1 (continued)

Test equipment used

☐ E-field probe 3 MHz – 18 GHz	NT-247	☐ T82-50 RF-Amplifier 2 GHz – 8 GHz	NT-331
☐ H-field probe 27 MHz – 1 GHz	NT-248	☐ 500W1000M7 - RF-Amplifier 80 - 1000 MHz / 500 W	NT-332
☐ ELT-400 1 Hz – 400 kHz	NT-249	☐ AS0102-65R - RF-Amplifier 1 GHz - 2 GHz	NT-333
☐ MDS 21 - Absorbing clamp 30 - 1000 MHz	NT-250	☐ APA01 – RF-Amplifier 0,5 GHz – 2,5 GHz	NT-334
☐ FCC-203I EM Injection clamp	NT-251	☐ Preamplifier 1 GHz - 4 GHz	NT-335
☐ FCC-203I-DCN Ferrite decoupling network	NT-252	☐ Preamplifier for GPS MKU 152 A	NT-336
☐ PR50 Current Probe	NT-253	☐ Preamplifier 100 MHz – 23 GHz	NT-337
☐ i310s Current Probe	NT-254/1	☐ DC Block 10 MHz – 18 GHz Model 8048	NT-338
☐ Fluke 87 V True RMS Multimeter	NT-260	☐ 2-97201 Electronic load	NT-341
☐ Model 2000 Digital Multimeter	NT-261	☐ TSX3510P - Power supply 0-30 V / 0 - 10 A	NT-344
☐ Fluke 87 V Digital Multimeter	NT-262/1	☐ TSX3510P - Power supply 0-30 V / 0 - 10 A	NT-345
☐ ESH2-Z5-U1 Artificial mains network 4x25A	NT-300	☐ VDS 200 Mobil-impuls-generator	NT-350
☐ ESH3-Z5-U1 Artificial mains network 2x10A	NT-301	☐ LD 200 Mobil-impuls-generator	NT-351
☐ ESH3-Z6-U1 Artificial mains network 1x100A	NT-302	☐ MPG 200 Mobil-Impuls-Generators	NT-352
☐ ESH3-Z6-U1 Artificial mains network 1x100A	NT-302a	☐ EFT 200 Mobil-impuls-generator	NT-353
☐ PHE 4500/B Power amplifier	NT-304	☐ AN 200 S1 Artificial Network	NT-354
☐ EZ10 T-Artificial Network	NT-305	☐ FP-EFT 32M 3 ph. Coupling filter (Burst)	NT-400/1
☐ SMG - Signal generator 0,1 - 1000 MHz	NT-310	☐ PHE 4500 - Mains impedance network	NT-401
☐ SMA100A - Signal generator 9 kHz - 6 GHz	NT-310/1	☐ IP 6.2 Coupling filter for data lines (Surge)	NT-403
☐ RefRad Reference generator	NT-312	☐ TK 9421 High Power Volt. Probe 150 kHz - 30 MHz	NT-409
☐ SMP 02 Signal generator 10 MHz - 20 GHz	NT-313	☐ ESH2-Z3 - Probe 9 kHz - 30 MHz	NT-410
☐ 40 MHz Arbitrary Generator TGA1241	NT-315	☐ IP 4 - Capacitive clamp (Burst)	NT-411
☐ Artificial mains network NSLK 8127-PLC	NT-316	☐ Highpass-Filter 100 MHz – 3 GHz	NT-412
☐ ESD 30 System up to 25 kV	NT-321	☐ Highpass-Filter 600 MHz – 4 GHz	NT-413
☐ PSURGE 4.1 Surge generator	NT-324	☐ Highpass-Filter 1250 MHz – 4 GHz	NT-414
☐ IMU4000 Immunity test system	NT-325/1	☐ Highpass-Filter 1800 MHz – 16 GHz	NT-415
☐ VCS 500-M6 Surge-Generator	NT-326		
☐ Oscillatory Wave Simulator incl. Coupling networks	NT-328a+b+c		
☐ BTA-250 - RF-Amplifier 9 kHz - 220 MHz / 250 W	NT-330		

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Appendix 1 (continued)

Test equipment used

☐ Highpass-Filter 3500 MHz – 18 GHz	NT-416	☐ FCC-801-AF10 Coupling decoupling network	NT-461
☐ RF-Attenuator 10 dB DC – 18 GHz / 50 W	NT-417	☐ FCC-801-S25 Coupling decoupling network	NT-462
☐ RF-Attenuator 6 dB DC – 18 GHz / 50 W	NT-418	☐ FCC-801-T4 Coupling decoupling network	NT-463
☐ RF-Attenuator 3 dB DC – 18 GHz / 50 W	NT-419	☐ FCC-801-C1 Coupling decoupling network	NT-464
☐ RF-Attenuator 20 dB DC – 1000 MHz / 25 W	NT-421	☐ SW 9605 - Current probe 150 kHz – 30 MHz	NT-465/1
☐ RF-Attenuator 30 dB DC – 1000 MHz / 1 W	NT-423	☐ 95242-1 – Current probe 1 MHz – 400 MHz	NT-468
☐ RF-Attenuator 30 dB	NT-424	☐ 94106-1L-1 – Current probe 100 kHz – 450 MHz	NT-471
☐ RF-Attenuator 6 dB DC – 1000 MHz / 1 W	NT-425	☐ GA 1240 Power amplifier according to EN 61000-4-16	NT-480
☐ RF-Attenuator 6 dB DC – 1000 MHz / 1 W	NT-426	☐ Coupling networks according to EN 61000-4-16	NT-481 - NT-483
☐ RF-Attenuator 6 dB	NT-428	☐ Van der Hoofden Test Head	NT-484
☐ RF-Attenuator 0 dB - 81 dB	NT-429	☐ EMC Video/Audiosystem	NT-511/1
☐ WRU 27 - Band blocking 27 MHz	NT-430	☐ ES-K1 Version 1.71 SP2 Test software	NT-520
☐ WHJ450C9 AA - High pass 450 MHz	NT-431	☐ EMC32 Version 10.50.00 Test software	NT-520/1
☐ WHJ250C9 AA - High pass 250 MHz	NT-432	☐ SRM-TS Version 1.3 software for SRM-3000	NT-522
☐ RF-Load 150 W	NT-433	☐ SRM-TS Version 1.3.1 software for SRM-3006	NT-522/1
☐ Impedance transducer 1:4 ; 1:9 ; 1:16	NT-435	☐ Spitzenberger und Spies Test software V4.1	NT-525
☐ RF-Attenuator DC – 18 GHz 6 dB	NT-436	☐ Noise power test apparatus according to EN 55014	NT-530
☐ RF-Attenuator DC – 18 GHz 6 dB	NT-437	☐ Vertical coupling plane (ESD)	NT-531
☐ RF-Attenuator DC – 18 GHz 10 dB	NT-438	☐ Test cable #4 for EN 61000-4-6	NT-553
☐ RF-Attenuator DC – 18 GHz 20 dB	NT-439	☐ Test cable #3 for conducted emission	NT-554
☐ I+P 7780 Directional coupler 100 - 2000 MHz	NT-440	☐ Test cable #5+#6 ESD-cable (2x470k)	NT-555 + NT-556
☐ ESH3-Z2 - Pulse limiter 9 kHz - 30 MHz	NT-441	☐ Test cable #8 Sucoflex 104EA	NT-559
☐ Power Divider 6 dB/1 W/50 Ohm	NT-443	☐ Test cable #9 (for outdoor measurements)	NT-580
☐ Directional coupler 0,1 MHz – 70 MHz	NT-444	☐ Test cable #10 (for outdoor measurements)	NT-581
☐ Directional coupler 0,1 MHz – 70 MHz	NT-445	☐ Test cable #13 Sucoflex 104PE	NT-584
☐ Tube imitations according to EN 55015	NT-450	☐ Test cable #21 for SRM-3000	NT-592
☐ FCC-801-M3-16A Coupling decoupling network	NT-458	☐ Shield chamber	NT-600
☐ FCC-801-M2-50A Coupling decoupling network	NT-459	☐ Climatic chamber	M-1200
☐ FCC-801-M5-25 Coupling decoupling network	NT-460		

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Appendix 1 (continued)

Test equipment used

☐ Anechoic Chamber 3 m / 5 m measuring distance	EMV-100	☐ Log.per Antenna 0,7 – 9 GHz STLP9149	EMV-305
☐ Turntabel 6 m diameter	EMV-101	☐ HF- Amplifier 9 kHz-250 MHz BBA150 (low noise)	EMV-306
☐ Antenna mast 1 – 4 m	EMV-102	☐ Load Dump Generator LD 200N	EMV-350
☐ Mast and Turntable controller FC-06	EMV-103	☐ Ultra Compact Symulator UCS 200N100	EMV-351
☐ EMC Video/Audiosystem	EMV-104	☐ Automotive Power fail module PFM 200N100.1	EMV-352
☐ EMC Software EMC32 Version 10.50.00	EMV-105	☐ Voltage Drop Symulator VDS 200Q100	EMV-353
☐ Hornantenna 1 – 18 GHz HF 907	EMV-110	☐ Arb. Generator AutoWave	EMV-354
☐ Antennapre.amp. 1 – 18 GHz ERZ-LNA0200-1800-30-2	EMV-111	☐ Ultra Compact Symulator UCS 500N7	EMV-355
☐ Trilog Antenna 30-3000 MHz VULB9163	EMV-112	☐ Coupling decoupling network CNI 503B7 / 32 A	EMV-356
☐ Monopol 9 kHz – 30 MHz VAMP 9243	EMV-113	☐ Coupling decoupling network CNI 503B7 / 63 A	EMV-357
☐ Antennapre.amp 18 – 40 GHz BBV 9721	EMV-114	☐ Telecom Surge Generator TSurge 7	EMV-358
☐ Hornantenna 200 – 2000 MHz AH-220	EMV-115	☐ Coupling decoupling network CNI 508N2	EMV-359
☐ DC Artificial Network PVDC 8300	EMV-150	☐ Coupling decoupling network CNV 504N2.2	EMV-360
☐ AC Artificial Network NNLK 8121 RC	EMV-151	☐ Immunity generator NSG4060/NSG4060-1	EMV-361
☐ EMI Receiver ESR26	EMV-200	☐ Coupling network CDND M316-2	EMV-362
☐ Signalgenerator 9 kHz – 40 GHz N5173B	EMV-201	☐ Coupling network CT419-5	EMV-363
☐ GPS Frequency normal B-88	EMV-202	☐ ESD Generator NSG 437	EMV-364
☐ DC Power supply N5745A	EMV-203	☐ Pulse Limiter VTSD 9561-F BNC	EMV-405
☐ Spektrum Analyzator FSV40	EMV-205	☐ Transient emission BSM200N40+BS200N100	EMV-450+451
☐ Thd Multimeter Model 2015	EMV-206	☐ Cap. Coupling Clamp HFK	EMV-455
☐ Poweramplifier PAS15000	EMV-207/abc	☐ Mag. Field System MS100N+MC26100+MC2630	EMV-456-458
☐ Inrush Current Source	EMV-208/abc	☐ Coupling network CDN M2-100A	EMV-459
☐ Arb.-generator Sycore	EMV-209	☐ Coupling network CDN M3-32A	EMV-460
☐ Harmonics/Flicker analyzer ARS 16/3	EMV-210	☐ Coupling network CDN M5-100A	EMV-461
☐ HF- Amplifier 9 kHz-250 MHz BBA150	EMV-300	☐ Current Clamp CIP 9136A	EMV-462
☐ HF- Amplifier 80 -1000 MHz BBA150	EMV-301	☐ DC Artificial Network HV-AN 150	EMV-464+465
☐ HF- Amplifier 0,8 - 6 GHz BBA150	EMV-302	☐ Coupling Clamp EM 101	EMV-466
☐ High Power Ant. 20-200 MHz VHBD 9134	EMV-303	☐ Decoupling Clamp FTC 101	EMV-467
☐ Log.per Antenna 80-2700 MHz STLP 9128 E special	EMV-304	☐ Power attenuator 10 dB / 250 Watt	EMV-469/2

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